AN AGRILUS NEW TO THE UNITED STATES (COLEOPTERA, BUPRESTIDAE)

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ABSTRACT

The Mexican Agrilus aurilatera Waterhouse is redescribed, a lectotype designated, and reported from Arizona for the first time.

Examination of Agrilus specimens in the collections of David S. Verity and E. Giesbert revealed the first records of the Mexican Agrilus aurilatera Waterhouse from Arizona and the United States. The insect is very similar to the male of A. walsinghami Crotch (see Fisher, 1928), and the following diagnosis will enumerate the differences from that species to facilitate identification. The genitalia are figured (Fig. 1).

Agrilus aurilatera Waterhouse, 1889, Biol. Cent.-Am., Coleoptera III, 1:120.

Form of male *Agrilus walsinghami*, aeneus throughout, some specimens with a bluish tinge, except for the portions of the elytra lateral to the medial costa, which are more or less strongly golden or cupreous; 11.1-13.0 mm long, 2.9-3.2 mm wide.

Head with the front wide, the margins of the eyes parallel, a relatively shallow oval depression and a narrow polished groove from the depression to the occiput; surface coarsely, densely punctate and conspicuously clothed with long white hairs which meet along the midline; antennae extending to about the middle of the pronotum, serrate from the fourth joint, the outer joints wider than long.

Pronotum as in A. walsinghami except that the medial depression is slightly shallower, prehumeral prominence oblique to the marginal carina rather than parallel, the marginal and submarginal carinae distinctly marked and separate for virtually their entire length.

Elytra similar in shape to those of A. walsinghami except that elytral apex is more gently rounded and less sharply angulate; disc with broad deep basal depression and 3 faint, relatively parallel costae, 1 along the sutural margin strongest and extending to apex, 1 at the middle faintest and extending two-thirds to four-fifths the length of the elytron, and another between these 2, intermediate in strength and about two-thirds the length of the elytron, all 3 much less strongly marked than in A. walsinghami; surface more finely and uniformly imbricate-punctate than in A. walsinghami, uniformly clothed with short inconspicuous hairs which are somewhat denser between the medial and sutural costae.

Abdomen beneath more finely punctate than in A. walsinghami, all the segments pubescent over their entire area; basal segments less strongly

marked, uniformly and densely pubescent; the pubescence slightly denser in large oval spots along the anterior vertical margins; prosternum somewhat more densely pubescent than in A. walsinghami.

Sexes similar, the female larger.

SPECIMENS EXAMINED: Arizona: Cochise Co., Fort Huachuca, on Baccharis, 23-VII-69, A. E. Lewis [D. S. Verity Coll.]; Miller Canyon, 8-VII-1973, E. Giesbert [E. Giesbert Coll.]. México: Michoacan, Pta. Garnica, 9270', 8-VII-69, L. A. Kelton [CNCI]; Durango, 6 mi E Durango, 24-VI-64, H. F. Howden [CNCI]; Chihuahua, Pinos Altos, Buchan-Guanajuato, Guanajuato, Hepburn, Lectotype [BMNH]; [BMNH], Dugés (2) [BMNH]; Distrito Federal, Temascaltepec, 1931, G. B. Hinton [BMNH]; without definite locality-"Saunders.74.18" [BMNH], "Mexico, Salle Coll. 649" [BMNH].

Three specimens in the British Museum possess syntype labels. The Saunders specimen bears an additional label "Agrilus aurilatea, (Type) Waterh." but is not cited in the original description and cannot be considered type material. The specimen from Chihuahua has been designated the type arbitrarily, and the Guanajuato specimen collected by Salle is considered a para-

type.

Agrilus aurilatera keys to A. concinnus Horn in Fisher's key to North American Agrilus, despite its close similarity to A. walsinghami, because aurilatera lacks the pubescent spots found on the elytra of the latter species. Besides the difference in geographic range from concinnus and the overall difference in color, aurilatera lacks the conspicuous pubescence on the pronotum of concinnus, and possesses the faint costae on the elytra. In addition to the lack of pubescent spots on the elytra, aurilatera lacks the strong sexual dimorphism of walsinghami, has much less prominent elytral costae and lacks the well-defined pubescent spots on the basal and vertical parts of the abdominal segments.

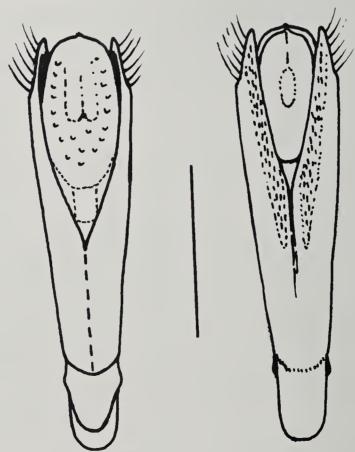


Fig. 1. Genitalia of Agrilus aurilatera Waterhouse, dorsal (left) and ventral (right) views. Line indicates 1 mm.

Correspondence with David Verity, who contacted the collector (Dr. A. E. Lewis), pinpoints *Baccharis sarothroides* as the plant on which the Arizona *aurilatera* was collected. Specimens of *A. walsinghami* in my collection were collected by George N. Walters on rabbit brush (*Chrysothamnus* sp.) on the Paradise Road, near Portal, Cochise Co., Arizona.

I would like to thank David Verity and Edmund Giesbert for loan of their specimens, the Canadian National Collection [CNCI] for loan of additional material, the British Museum (Natural History) [BMNH] for help during visits, and the University of Connecticut Research Foundation for funds under grant 35-451 to examine the type of aurilatera.

LITERATURE CITED

FISHER, W. S. 1928. A revision of the North American species of buprestid beetles belonging to the genus *Agrilus*. U. S. Nat. Mus. Bull. 145:1-347.

BOOK REVIEW

The biology of *Tribolium*; with special emphasis on genetic aspects. Vol. I by A. Sokoloff. 1972. Oxford University Press, Ely House, London, W. I. England, and 200 Madison Ave., N. Y., N. Y. 10016. 300 p. \$41.00.

This volume contains a review of the known information on a single genus of Tenebrionidae. Chapter titles indicate the scope: 1) Introduction; 2) Taxonomic position and evolutionary trends; 3) Morphology; 4) Internal anatomy and histology; 5) Electron microscopy; 6) Chromosomes in *Tribolium* and *Dermestes*; 7) Developmental and post-embryonic studies; 8) Teratological abnormalities; 9) Index. Volume 2 is to deal with geographic distribution and ecological aspects and Volume 3 primarily with genetic aspects, including irradiation. The Appendix is to include "... descriptions of equipment and techniques useful in handling beetles."

Although this is primarily a literature review, Dr. Sokoloff intersperses some personal data, some of which appeared in the *Tribolium* Information Bulletin. It is extremely useful to have such extensive and scattered information summarized in one place. However, the \$41.00 price tag makes it out of reach for the average coleopterist, especially if there are 2 more volumes with the same price.

-R. E. Woodruff